
AGENCY OVERVIEW**627 Upper Great Plains Transportation Institute**

Date: 12/23/2014**Time:** 13:11:36**Statutory Authority**

North Dakota Century Code Chapter 54-53.

Agency Description

The Upper Great Plains Transportation Institute (UGPTI) was created by the North Dakota legislature in 1967 as part of North Dakota State University to foster a better understanding of the role of transportation in the economy and state. UGPTI provides timely information to state and local governments regarding the condition of transportation infrastructure in the state and expected road and bridge investment needs. UGPTI provides freight transportation and logistics expertise that helps North Dakota businesses compete nationally and globally.

Agency Mission Statement

Providing innovative transportation research, education, and outreach that promote the safe and efficient movement of people and goods.

- UGPTI conducting applied and advanced research in highway, transit, rail, air, and waterway transportation that addresses the critical issues of the state, region, and nation.
- Educating the transportation workforce of tomorrow through multidisciplinary curricula that focus on transportation economics, management, infrastructure planning, mobility, and supply chain logistics.
- Improving the skills and knowledge of the existing workforce through training, technical assistance, and the transfer of research results to practitioners.

Agency Performance Measures

Performance measures reporting are not currently used by the UGPTI.

Major Accomplishments

1. Provided the governor, the legislature, the department of transportation, and other governmental agencies with vital information about roadway investments to propel economic growth in the state and region.
2. Provided state agencies, agricultural industries, and private investment groups with important insights into grain marketing patterns and trends.
3. Led efforts to increase the focus on transportation safety issues and trends in North Dakota.
4. Conducted research to improve the mobility of North Dakota citizens.
5. Responded to state agency needs for independent research to help improve personal and freight mobility within North Dakota.
6. Offered training throughout the state and region to road managers, transportation engineers, city planners, and transit operators to keep them up-to-date on critical skills and meet federal training requirements.
7. Helped prepare the transportation professionals of tomorrow through a combination of classroom and hands-on experiences.
8. Provided important services to Metropolitan Planning Organizations (MPOs) and the state to help them predict future traffic levels, update their transportation planning procedures, and deploy Intelligent Transportation Systems technologies.
9. Collaborated with NDDOT and the ND Association of Oil and Gas Producing Counties to help counties, townships, and cities cope with unprecedented impacts from oil production.

Future Critical Issues

- Federal Policy and Institutional Shifts: The elimination of Congressional earmarks has precluded certain funding opportunities. At the same time, Congress' failure to enact a long-term surface transportation bill has created uncertainty for state and metropolitan agencies that fund transportation research. Although Congress enacted a two year reauthorization bill in 2012, the legislation resulted in a much shorter planning horizon than when previous surface transportation programs were typically authorized for five or six years. Current legislation (MAP-21) has been extended through May of 2015. The growing uncertainty about the future of federal transportation programs makes it difficult for UGPTI to procure grants from agencies that rely extensively upon federal funds to finance their research and planning programs.

AGENCY OVERVIEW**627 Upper Great Plains Transportation Institute****Date:** 12/23/2014**Time:** 13:11:36

- **Federal Match Requirements:** Many federal programs now require a 100 percent match, which increases the amount of state and non-federal funds needed to compete for grants. The University Transportation Centers (UTC) Program—a key source of funding for UGPTI—requires a substantial “institutional commitment” from the university and state.
- **Impacts of Uncertainty on Staffing:** Uncertainties posed by the short-run planning horizon at the national level and the cascading effects on state and local agencies have increased the difficulty of recruiting and retaining faculty and staff, making it more difficult to adjust to changing workloads.
- **Infrastructure Planning and Training Needs in North Dakota:** The demand for transportation infrastructure studies has increased greatly during the last five years. At the same time, demand for technical training in roadway planning by counties and cities has risen as these jurisdictions try to cope with rapidly increasing truck traffic. The increased workloads have necessitated the reallocation of recently vacated positions and the creation of new ones. The need for a greater presence in western North Dakota requires more in-state travel, greater time commitments from the director and staff, and more resources to meet time-sensitive demands.
- **Growing Transportation Safety Concerns:** North Dakota is facing critical safety questions about rail, pipeline, and motor carrier transportation that pose issues for continued economic growth. The movement of Bakken crude oil within the state and nation has triggered demands for safety research and technical assistance. With little or no state funding for safety research, UGPTI is trying to redirect some of its efforts to address critical safety issues. However, at present, UGPTI has no resources to expand its transportation safety programs to meet the requests of state and local agencies.

REQUEST SUMMARY

627 Upper Great Plains Transportation Institute
Biennium: 2015-2017

Bill#: HB1020

Date: 12/23/2014

Time: 13:11:36

Description	Expenditures 2011-2013 Biennium	Present Budget 2013-2015	Budget Request Change	Requested Budget 2015-2017 Biennium	Optional Budget Request
By Major Program					
Core Program	15,093,707	26,530,169	(1,235,469)	25,294,700	0
Total Major Program	15,093,707	26,530,169	(1,235,469)	25,294,700	0
By Line Item					
Accrued Leave	0	241,627	(241,627)	0	0
Transportation Institute	15,093,707	26,288,542	(993,842)	25,294,700	0
Total Line Items	15,093,707	26,530,169	(1,235,469)	25,294,700	0
By Funding Source					
General Fund	1,929,191	4,077,206	3,577,925	7,655,131	0
Federal Funds	11,137,524	19,007,683	(7,307,488)	11,700,195	0
Special Funds	2,026,992	3,445,280	2,494,094	5,939,374	0
Total Funding Source	15,093,707	26,530,169	(1,235,469)	25,294,700	0
Total FTE	51.75	54.98	4.00	58.98	0.00

REQUEST DETAIL

627 Upper Great Plains Transportation Institute
Biennium: 2015-2017

Bill#: HB1020

Date: 12/23/2014

Time: 13:11:36

Description	Expenditures 2011-2013 Biennium	Present Budget 2013-2015	Budget Request Change	Requested Budget 2015-2017 Biennium	Optional Budget Request
Accrued Leave					
Fringe Benefits	0	241,627	(241,627)	0	0
Total	0	241,627	(241,627)	0	0
Accrued Leave					
General Fund	0	241,627	(241,627)	0	0
Federal Funds	0	0	0	0	0
Special Funds	0	0	0	0	0
Total	0	241,627	(241,627)	0	0
Transportation Institute					
Salaries - Permanent	8,188,961	8,440,589	1,258,163	9,698,752	0
Temporary Salaries	1,320,000	2,250,925	1,246,140	3,497,065	0
Fringe Benefits	3,131,169	3,266,598	800,740	4,067,338	0
Travel	350,000	993,472	(630,235)	363,237	0
Supplies - IT Software	100,000	202,484	(12,783)	189,701	0
Supply/Material-Professional	50,000	170,205	(130,205)	40,000	0
Food and Clothing	30,000	80,000	(55,575)	24,425	0
Miscellaneous Supplies	25,000	25,000	4,863	29,863	0
Office Supplies	50,000	597,223	(567,133)	30,090	0
Postage	151,221	151,221	(108,627)	42,594	0
Printing	75,000	187,377	(97,856)	89,521	0
IT Equip Under \$5,000	100,000	440,550	(325,405)	115,145	0
Other Equip Under \$5,000	0	443,000	(443,000)	0	0
Office Equip & Furn Supplies	45,000	10,000	35,000	45,000	0
Insurance	11,983	20,000	(11,981)	8,019	0
Rentals/Leases-Equip & Other	125,000	144,000	286,000	430,000	0
Rentals/Leases - Bldg/Land	0	450,000	(450,000)	0	0
Repairs	0	32,000	0	32,000	0
IT - Communications	150,000	456,000	(319,898)	136,102	0
Professional Development	75,000	235,516	(214,796)	20,720	0
Operating Fees and Services	115,000	1,724,000	(1,549,000)	175,000	0
Fees - Professional Services	75,000	205,000	13,110	218,110	0
Waivers/Scholarships/Fellowshi	14,000	18,000	2,000	20,000	0
Equipment Over \$5000	0	0	58,000	58,000	0
Special Line Other	0	1,250,382	(1,250,382)	0	0
Grants, Benefits & Claims	911,373	4,495,000	1,469,018	5,964,018	0
Total	15,093,707	26,288,542	(993,842)	25,294,700	0

Transportation Institute

REQUEST DETAIL**627 Upper Great Plains Transportation Institute**
Biennium: 2015-2017**Bill#: HB1020****Date:** 12/23/2014**Time:** 13:11:36

Description	Expenditures 2011-2013 Biennium	Present Budget 2013-2015	Budget Request Change	Requested Budget 2015-2017 Biennium	Optional Budget Request
General Fund	1,929,191	3,835,579	3,819,552	7,655,131	0
Federal Funds	11,137,524	19,007,683	(7,307,488)	11,700,195	0
Special Funds	2,026,992	3,445,280	2,494,094	5,939,374	0
Total	15,093,707	26,288,542	(993,842)	25,294,700	0

Funding Sources

General Fund	1,929,191	4,077,206	3,577,925	7,655,131	0
Federal Funds	11,137,524	19,007,683	(7,307,488)	11,700,195	0
Special Funds	2,026,992	3,445,280	2,494,094	5,939,374	0
Total Funding Sources	15,093,707	26,530,169	(1,235,469)	25,294,700	0

CHANGE PACKAGE SUMMARY

627 Upper Great Plains Transportation Institute
Biennium: 2015-2017

Bill#: HB1020

Date: 12/23/2014

Time: 13:11:36

Description	Priority	FTE	General Fund	Federal Funds	Special Funds	Total Funds
Base Budget Changes						
One Time Budget Changes						
A-B 2 One-time Request		0.00	398,000	0	0	398,000
A-E 1 Remove 2013-15 One Time Funding		0.00	(1,250,000)	0	0	(1,250,000)
A-E 2 Remove 2011-13 Operating Carryover		0.00	(382)	0	0	(382)
Total One Time Budget Changes		0.00	(852,382)	0	0	(852,382)
Ongoing Budget Changes						
A-A 1 UGPTI Initiatives		4.00	4,402,000	0	0	4,402,000
A-A 4 Other Revenue Change		0.00	300,548	(4,434,570)	247,146	(3,886,876)
Base Payroll Change		0.00	(272,241)	(2,872,918)	2,246,948	(898,211)
Total Ongoing Budget Changes		4.00	4,430,307	(7,307,488)	2,494,094	(383,087)
Total Base Budget Changes		4.00	3,577,925	(7,307,488)	2,494,094	(1,235,469)

BUDGET CHANGES NARRATIVE

627 Upper Great Plains Transportation Institute

Bill#: HB1020

Date: 12/23/2014

Time: 13:11:36

Change Group: A	Change Type: A	Change No: 1	Priority: 3
------------------------	-----------------------	---------------------	--------------------

UGPTI Initiatives

NDSU's Upper Great Plains Transportation Institute (UGPTI) is requesting appropriations to continue, expand, and initiate five high-priority program areas. These initiatives are recommended by UGPTI's Advisory Council, which considers them to be critical state needs. Four of the five initiatives, totaling **\$4,402,000**, are requested as base increases, and include the following:

Transportation Infrastructure and Safety Center - \$2,738,000 The requested funds will:

1. Help keep in place the experienced staff currently conducting the road and bridge studies for the governor and legislature and provide funding for UGPTI to perform these studies on a biennial basis in the future.
2. Develop expertise in asset management, focusing on the preservation and maintenance of transportation infrastructure.
3. Build expertise in railway, pipeline, motor carrier, and highway safety to complement UGPTI's existing human factors safety expertise.
4. Provide resources to collect traffic and infrastructure data for county, township, and tribal roads and bridges, regional rail lines, and gathering pipelines.
5. Provide operating funds and support.

Specifically, the funds will provide for the following positions: (1) **Senior pavement/bridge engineer** (0.25 FTE) - current position #27769-1; (2) **Associate pavement/bridge engineer** (1 FTE) - current position #100593-1; (3) **Asset management specialist** (1 FTE) - VACANT position #21395-1; (4) **GIS transportation analysts** (1 FTE) - current position #100023-1; (1 FTE) - position #UGPTI-18; (5) **Senior transportation economist** (0.5 FTE) - current position #19553-1; (6) **Senior safety researcher/statistician** (0.5 FTE) - current position #21712-1; (7) **Senior technology engineer** (0.75 FTE) - current position #18737-1; (8) **Railway Safety Specialist** (1 FTE) - VACANT position # 24714-1; (9) **Pipeline Safety Specialist** (1 FTE) - position #UGPTI-15; (10) **Motor Carrier Safety Specialist** (0.5 FTE) - position #UGPTI-16; (11) **Highway Safety Specialist** ((0.5 FTE) - position #UGPTI-13.

The funds will also provide for extensive data collection on an annual or biennial basis including traffic, pavement and bridge condition, and regional railroad infrastructure data. This effort will require the purchase, rental, or lease and maintenance of traffic and other data collection equipment and subcontracts with engineering firms to collect and update data. Funds will also support graduate and undergraduate students.

Energy Logistics & Transportation Center - \$747,500 The requested funds will be used to acquire the necessary staff expertise and fund the following positions: (1) **Senior transportation economist** (0.5 FTE) - current position #19553-1; (2) **Senior researcher and freight specialist** (0.3 FTE) - current position #21712-1; (3) **Energy logistics specialist** (1 FTE) - VACANT position #27317-1; (4) **GIS transportation analyst** (1 FTE) - current position #100022-1. The funds will also support graduate and undergraduate students be used for specialized software (e.g., REMI) and data.

Air Services Research, Planning, and Technical Assistance Program - \$651,500 The requested funds will be used to acquire the necessary staff expertise and fund the following positions: (1) **Program director** (1 FTE) - position #UGPTI-19; (2) **Senior technology engineer** (0.25 FTE) - current position #18737-1; (3) **Air services analyst** (1 FTE) - position #UGPTI-20. The funds will also support graduate and undergraduate students and allow UGPTI to work with the North Dakota UAS effort and the ND Aeronautics Council.

Workforce Development for Western North Dakota - \$265,000 Oil and gas production and the development of tertiary enterprises in North Dakota are fueling the demand for skilled workers, including transportation and logistics experts, which are needed in many sectors of the state's economy. In spite of this critical need, transportation and logistics curricula are not widely available throughout the state, especially at the undergraduate level. While NDSU has faculty expertise and offers graduate programs in transportation and logistics, undergraduate programs in these fields are not available or easily accessible where they are most needed—in the western part of the state.

BUDGET CHANGES NARRATIVE

627 Upper Great Plains Transportation Institute

Bill#: HB1020

Date: 12/23/2014

Time: 13:11:36

A biennial appropriation of \$265,000 would allow UGPTI to partner with other institutions within the North Dakota State University System to offer undergraduate programs in transportation and logistics, making these programs widely accessible throughout the state.

Change Group: A	Change Type: A	Change No: 4	Priority: 5
-----------------	----------------	--------------	-------------

Other Revenue Change

Increase or (decrease) in other revenue.

The Institute has always benefited from congressional earmarks for several of our programs. However, earmarks have been discontinued, limiting opportunities for federal grants/contracts. The procurement of federal grants and contracts has become much more competitive. With limited staff, it is challenging for UGPTI to compete with other well-funded universities in other states. UGPTI was successful in the national competition for the UTC regional grant to the Mountain-Plains Consortium and partnered with Montana State University in a regional Transit grant. However, some major grants from prior budget periods have expired.

Rural Transportation Safety and Security Center - One-time federal funds expired. We continue to receive limited funding from the NDDOT for safety projects.

Small Urban and Rural Transit Center - Earmark funding expired during the last biennium. We were successful in partnering with the University of South Florida and Montana State University in regional Transit grants, however, funding is not at the level of earmark funding. These new grants also require match funds.

USDOT - RITA Grant - One time federal funding for this program expires December 2014.

The **Education program** previously received federal funds from the Department of Army for the Master of Managerial Logistics program.. However, these funds have also been terminated and we are now funding the program through on-line registrations/tuition and local funds.

Local Technical Assistance Program (LTAP) and Transportation Learning Network (TLN) - Contract funding is increasing for the LTAP and TLN program to support efforts with training and outreach in part due to oil production in western North Dakota and expanded training for engineering technicians.

Change Group: A	Change Type: B	Change No: 2	Priority: 4
-----------------	----------------	--------------	-------------

One-time Request

Transportation Security Research, Training, and Technical Assistance Program - UGPTI is requesting one-time funding of **\$398,000**. The requested funds will be used to acquire the necessary staff expertise and fund the following positions: (1) **Senior program director** (0.2 FTE) - current position #21645-1; (2) **Senior technology engineer** (0.25 FTE) - current position #18737-1; (3) **Trainer/outreach person** (1 FTE) - current position #27499-1.

The funds will also support **graduate and undergraduate students** - position #UGPTI-21. The request is for one-time funding, to demonstrate the viability of this program.

BUDGET CHANGES NARRATIVE

627 Upper Great Plains Transportation Institute

Bill#: HB1020

Date: 12/23/2014

Time: 13:11:36

Change Group: A	Change Type: E	Change No: 1	Priority: 1
-----------------	----------------	--------------	-------------

Remove 2013-15 One Time Funding

To remove **\$1,250,000** (GF) for state match for federal funds (SB2020, Section 2).

Change Group: A	Change Type: E	Change No: 2	Priority: 2
-----------------	----------------	--------------	-------------

Remove 2011-13 Operating Carryover

To remove the 2011-13 general fund carryover for UGPTI, totaling **\$382**.

Change Group: R	Change Type: A	Change No: 1	Priority:
-----------------	----------------	--------------	-----------

UGPTI adjust to recommendation

Adjusts UGPTI initiatives entered in base budget to get to Executive Recommendation.

Change Group: R	Change Type: B	Change No: 1	Priority:
-----------------	----------------	--------------	-----------

UGPTI adjust to recommendation

Adjusts UGPTI one-time initiatives entered in base budget to get to Executive Recommendation.